

# ALLEN, MOLINE & HAROLD

ROBERT G. ALLEN DENISE B. MOLINE DOUGLAS W. HAROLD, JR.

LLOYD D. YOUNG OF COUNSEL

SUITE 200 10500 BATTLEVIEW PARKWAY POST OFFICE BOX 2126 MANASSAS, VIRGINIA 22110

(703) 361-2278 FAX (703) 361-0594 SUITE 200 2000 L STREET, N.W. WASHINGTON, D.C. 20036

5413 MAIN STREET STEPHENS CITY, VIRGINIA 22655

RECEIVED

APR 2 4 1992

April 24, 1992

Federal Communications Commission Office of the Secretary

Ms. Donna R. Searcy, Secretary Federal Communications Commission 1919 M Street, N.W., Room 222 Washington, D.C. 20554

Petition for Rulemaking of

Crescomm Transmission Services, Inc.

File No. RM-7912

AMH #1300-

Dear Ms. Searcy:

There are submitted herewith an original and four copies of the Reply of Crescomm Transmission Services, Inc. for filing in File No. RM-7912. Should there be any question concerning this matter, please contact the undersigned.

Respectfully submitted,

LDY: kao Enclosures

> No. of Copies rec'd\_ List A B C D E

# ORIGINAL BEFORE THE RECEIVED Federal Communications Commission 2 4 1992 WASHINGTON, D.C.

In the Matter of	Office of the Secretary
AMENDMENT ON PART 80 OF THE THE COMMISSION'S RULES	) Docket No ) File No. RM-7912
for an Allocation of Frequencies for Digital Shipboard Earth Stations	) ) )

To: The Commission

### REPLY OF CRESCOMM TRANSMISSION SERVICES, INC.

Crescomm Transmission Services, Inc. ("Crescomm"), by counsel and pursuant to Section 1.405(b) of the Commission's Rules, hereby replies to the comments filed by other parties in response to the Public Notice of the captioned Petition for Rule Making (File No. RM-7912), as follows:

### **BACKGROUND**

1. Crescomm's Petition seeks issuance of a new rule or rules in Part 80, Stations in the Maritime Service, under which Digital Shipboard Earth Stations<sup>1</sup> would be licensed to utilize C-Band and/or Ku-Band frequencies for communications between locations in Ocean, Sea and Coastal areas within the "foot print" of Satellite Systems, on the one hand, and Fixed and Temporary-Fixed Satellite Earth Stations on the other hand. Public Notice of the filing of the Petition was released March 11, 1992. Crescomm and twenty-three other parties have filed comments in response to the Public Notice and the Petition under

<sup>&</sup>lt;sup>1</sup>/Section 80.5 of the Rules defines a "ship station". The phrase "Digital Shipboard Earth Station", as used herein, means a ship station as defined in Section 80.5, which functions as a high speed digital satellite earth station (herein called "DSES").

Section 1.405(a) of the Commission's Rules. Pursuant to Section 1.405(b), Crescomm submits this reply to the Comments of those discussed below.

## ALLOCATION OF FREQUENCIES FOR DIGITAL SHIPBOARD EARTH STATIONS HAS RECEIVED SUBSTANTIAL SUPPORT

- 2. Two of the most important participants in satellite communications have strongly and broadly supported Crescomm's proposal to make C-Band and Ku-Band frequencies available for use by DSES in communicating from locations in Ocean, Sea and Coastal areas with Fixed and Temporary-Fixed Satellite Earth Stations, namely Communications Satellite Corporation ("ComSat") and Pan Am Satellite ("PanAmSat"). They are, of course, the major providers of satellite space segment capacity. ComSat's role as the U.S. Signatory for the INTELSAT and INMARSAT satellite systems and PanAmSat's "Separate" international satellite systems are a matter of record before the Commission and need not be described in any detail here. What is significant here is the fact that ComSat and PanAmSat have stepped forward with support for the concept of DSESs being given the ability to communication on C and Ku-Bands with land-based earth stations.
- 3. ComSat broadly supports the availability of customer options for choosing from among a variety of telecommunications suppliers that will satisfy their communications need. In order to make more of such options available, ComSat offers its encouragement for the Commission to institute rule making proceedings looking toward the establishment of new rules and procedures ". . .that would permit DSES and DSES type stations to operate in the maritime environment by communicating with fixed stations on land via

appropriate satellites."<sup>2</sup> From PanAmSat's perspective, "There would be unquestioned public interest benefits from the grant of Crescomm's Petition", because the resulting ability of DSESs to communicate directly with ordinary U.S. earth stations would "mean that those on board ships may be in instant communications with the full range of U.S. facilities, without the need for an intervening specialized 'coast earth station."<sup>3</sup>/

# THE COURSE OF ACTION RECOMMENDED BY COMSAT APPEARS REASONABLE AND WORKABLE

4. ComSat, in its comments, suggests a four-step approach for achieving the overall goal of creating a regulatory environment in which DSESs would be able to communicate via satellite with land based earth stations, on a regularly licensed basis. Crescomm recognizes, as does ComSat, that there are implications which stem from the applicable International Radio Regulations that must be accommodated in the proposed proceeding looking toward regularly licensing DSESs. Accordingly, Crescomm must recognize as well that the path toward the ultimate regularization of DSES communications with land based earth stations may well involve a multi-step process, such as that suggested by ComSat or some other appropriate steps. The rule making proceeding requested by Crescomm can serve as the vehicle both for developing those procedural steps as well as the ultimate regularization of the proposed DSES operations. In Crescomm's view, ComSat's suggestions for a four-step approach constitutes a very useful step in the right direction.

<sup>&</sup>lt;sup>2</sup>/Comments of ComSat, p. 1.

<sup>&</sup>lt;sup>3</sup>/Comments of PanAmSat, p. 2.

- 5. ComSat's proposed first step would involve making an industry wide assessment of the interference potential of DSES type stations in three types of settings. It then offers its own initial observations regarding interference potential of DSES stations, which strongly confirm Crescomm's own experience gained both from its tests at sea locations and from current operations on several cruise line ships described in its Petition. Crescomm followed existing coordination procedures for its uses of C-Band frequencies in each of these operations, the results of which provided a high degree of confidence that no harmful interference would result. The operations in the described environments have confirmed those confidences. As far as Crescomm's aware, none of these operations has caused interference with either land-based earth stations or with orbiting satellites.
- 6. Support for Crescomm's petition also comes from CruiseCom International, Inc., who, according to its comments, has taken certain steps toward possible future placement of DSESs on cruise line ships. CruiseCom's preparations also give it confidence that DSES technology has now been developed that will enable DSESs to communicate effectively via satellite with land based stations via satellite on an interference free basis.<sup>4</sup>
- 7. ComSat next suggests that once the interference assessment phase has been completed, procedures for identifying causes of harmful interference and getting harmful transmission shut down promptly will need to be developed. Crescomm pledges its full cooperation both toward the completion of an interference assessment and the

<sup>&</sup>lt;sup>4</sup> See Application of CruiseCom International, Inc. et al., at p. 4.

Qualcomm, Incorporated also supports the use of C-Band and Ku-Band frequencies for satellite base maritime communications. See Opposition of Qualcomm, Incorporated at p. 1. Fifteen other parties have also filed letters in support of Crescomm's Petition.

establishment of procedures for detecting, identifying and promptly halting harmful interference. Crescomm also is prepared to participate in domestic and international procedures necessary for developing appropriate DSES parameters, in procedures for coordinating operations of such stations with all services utilizing the particular C-Band and Ku-Band segments, and in obtaining international acceptance of appropriate frequency reallocation, hopefully at a near term future "WARC" conference. The rule making proceeding requested by Crescomm should be instituted so as to provide the initial procedural vehicle for going forward with the multi-step process that may ultimately prove to be necessary for the regularization of DSES communications with land based stations.

## APPROPRIATE PROCEDURES TO PRECLUDE HARMFUL INTERFERENCE CAN BE ESTABLISHED

- 8. The Bell Atlantic Parties, GTE Spacenet Corporation and National Spectrum Managers Association, Inc. voice concerns for potential harmful interference which DSESs could cause to other services while communicating on C-Band and Ku-Band frequencies with land based earth stations. The potential for harmful interference becomes a matter of great concern, of course, with any proposed new uses of the frequency spectrum. However, that is no reason in and of itself for not going forward, particularly where, as here, a frequency utilization that will greatly benefit the maritime industries is proposed.
- 9. Moreover, as discussed above, a well recognized first step toward the proposed frequency utilization should and must be the establishment of procedures for conducting an industry wide assessment of the interference potential of DSESs. In this regard, experience gained to date by Crescomm as described in its Petition as well as ComSat's own observations strongly suggest that harmful interference can be avoided

through utilization of appropriate coordination procedures and by means of detection,

identification and shut-down procedures, all of which can be developed in the course of

rule making procedures which Crescomm has requested the Commission to initiate.

**SUMMARY** 

10. The establishment of new rules and procedures which will allow DSES and

DSES type stations to operate in the maritime environment and communicate on C-Band

and Ku-Band frequencies via satellite with land based earth stations has been shown to be

the public interest. Such DSES operations would permit video, high speed digital and

other high capacity direct communications links with all points served by land based earth

stations, thus eliminating vestiges of great isolation while on board ships at sea. The

proposed rule making procedures can also be utilized for necessary assessment of the

potential for harmful interference from such DSES operations, for formulating procedures

for detecting, identifying and removal of any causes of harmful interference, for

coordinating frequency usages by DSESs, and for a regularization of DSES operations

within the bounds of the current International Radio Regulations and bringing about any

changes to those Regulations that may ultimately be appropriate.

Respectfully submitted,

CRESCOMM TRANSMISSION SERVICES, INC.

By:

ALLEN, MOLINE & HAROLD 10500 Battleview Parkway

Manassas, Virginia 22110

(703) 361-2278

April 24, 1992

1 Action

Its Attorney

### **CERTIFICATE OF SERVICE**

I, Kelly A. O'Donnell, a secretary with the law firm of Allen, Moline & Harold, have caused to be served this 24th day of April, 1992 by first class mail, postage prepaid, a copy of the foregoing REPLY OF CRESCOMM TRANSMISSION SERVICES, INC. on the following:

Victor J. Toth, Esq.
Law Offices of Victor J. Toth, P.C.
2719 Soapstone Drive
Reston, Virginia 22091
Counsel for CruiseCom International, Inc.

Robert S. Koppel, Esq.

James T. Roche, Esq.

15245 Shady Grove Road, Suite 460

Rockville, Maryland 20850

Counsel for IDB Communications Group, Inc.

Henry Goldberg, Esq.
Phillip L. Spector, Esq.
Goldberg & Spector
1229 Nineteenth Street, N.W.
Washington, D.C. 20036
Counsel for Pan American Satellite

Cheryl Lynn Schneider, Esq.
950 L'Enfant Plaza, S.W.
Washington, D.C. 20024
Counsel for Communications Satellite Corporation

Sheila Mellody Thomas C. Natoli GTE Spacenet Corporation 1700 Old Meadow Road McLean, Virginia 22102

Sambran Sandoval, President National Spectrum Managers Association, Inc. P.O. Box 8378 Denver, Colorado 80201 William Roughton, Esq.
Lawrence W. Katz, Esq.
1710 H Street, N.W.
Washington, D.C. 20006
Counsel for The Bell Atlantic Telephone Companies

Albert Shuldiner, Esq.
Nixon, Hargrave, Devans & Doyle
One Thomas Circle, Suite 800
Washington, D.C. 20005
Counsel for Qualcomm, Incorporated

William A. Starr Vice President Leasing Dynamics, Inc. 11279 Cornell Park Drive Cincinnati, Ohio 45242

Robert Goodman Chairman and CEO Cruisephone, Inc. 500 Cypress Creek Road West Suite 260 Ft. Lauderdale, Florida 33309

Kelly A. O'Donnell